

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

62.77

REGISTERED
OCT 20 1910
U. S. DEPARTMENT OF AGRICULTURE



COKER'S PEDIGREED SEEDS

**AND OTHER FINE SEEDS OF
SOUTHERN STAPLE FARM CROPS**

FALL

1917

PEDIGREED SEED COMPANY

OPERATING THE PEDIGREED SEED BREEDING AND EXPERIMENTAL FARMS

DAVID R. COKER, President

HARTSVILLE, SOUTH CAROLINA

Some Reasons **Why It Will Pay You To Buy**

COKER'S PEDIGREED SEEDS

COKER'S PEDIGREED SEEDS ARE TESTED SEEDS

What are tested seeds? Practically every seedsman in the United States advertises "My seeds are tested seeds." In many cases it is purely a catch phrase for advertising purposes, as only a few seedsmen conduct test farms of any nature. It is, therefore, well to inquire "in what way are your seeds tested?" Coker's Pedigreed Seeds are tested in three ways:

First. They are bred by testing. More than three hundred plants and strains of an original strain of Red Appler Oats were tested in accurate competition through a period of from one to four years to produce the strain of Coker's Pedigreed Red Appler Oats we are selling this year. **BREEDING TO PEDIGREE MEANS BREEDING BY TESTING.**

Second. Coker's Pedigreed Seed are tested against other varieties. On our extensive experimental farms we test every year in accurate competition the leading varieties of all the principal Southern crops. In all these tests through a period of ten years Coker's Pedigreed Seeds have stood at or near the highest place in yield with but few exceptions.

Third. Thousands of customers through the entire South give the final authoritative test to Coker's Pedigreed Seeds—**THAT OF ACTUAL PERFORMANCE.** Our last reports from planters of Coker's Pedigreed Red Appler Oats show that more than 90 per cent of them obtained a bigger yield from these oats than from any other variety planted. Such are the final tests which give Coker's Pedigreed Seed an unsurpassed leadership among Southern seeds.

COKER'S PEDIGREED SEEDS ARE GUARANTEED

No other Southern seedsman gives such a guarantee for his seed as we give. We guarantee Coker's Pedigreed Seeds to be bred by the plant-to-row method and to be true to name. The reason we can make this guarantee is that we breed the seed ourselves, sow them under personal supervision, reclean and grade them in our own warehouse and give personal supervision to them until they are loaded on the cars.

We also guarantee the physical purity of our seeds and give the exact figures on every bag. We make germination tests—using the most approved type of electric germinator, of same kind as used by United States Department of Agriculture—and guarantee our seeds to germinate above certain percentages, the figures in every case being printed on a tag attached to the bag.

COKER'S PEDIGREED SEEDS ARE RECLEANED AND GRADED

The physical condition of the seed is an important factor in crop yields. A light weight seed in many cases will not produce one-half as much as heavy seed. In order, therefore, to make Coker's Pedigreed Seed most productive and thereby more valuable to the planter, they are carefully graded and only the mature, the plump, heavy seeds are used. It is not enough that seed be run through a machine which takes out only trash and foreign matter, but all light, immature and shrunken grains should be removed as well. In dry years particularly it is necessary for seed to be carefully graded, as a large proportion of the seed will naturally be light weight. In some cases we grade our seed 50 %, using only the best half for seed purposes.

COKER'S PEDIGREED SEEDS

AND OTHER FINE SEEDS OF SOUTHERN STAPLE FARM CROPS

1917

Pedigreed Seed Co., Hartsville, S. C.

DAVID R. COKER, President

Operating The Pedigreed Seed Breeding and Experimental Farms

To the Southern Farmer:

OUR country is at war. To insure the safety and freedom of the world we must win. We must furnish men—possibly millions of them—but we must also furnish billions of dollars and millions of tons of foodstuffs for our own armies and those of our Allies. It is the literal truth that the safety of the Nation depends on the American farmer and the American housewife. If they produce liberally and consume economically, the necessary food and the necessary money will be available. Our President has called upon all to step into the ranks and do his or her part toward the success of the war. Every patriot will respond and those who do not may be termed slackers or traitors. Every farm, every home and every business should be so conducted during the term of the war as to be of the greatest possible assistance to the government.

The average Southern farmer has in prospect for this fall a greater net profit than he ever before enjoyed. What will he do with it? Will he show prudence and patriotism, pay his debts, invest liberally in liberty bonds, contribute to the Red Cross and other charitable war agencies, respond to all other patriotic calls made on him by the Nation and the State Councils of Defense, and put aside the balance for those emergencies which the future is almost sure to bring forth? Or will he launch upon various speculations and extravagances which will make the temporary prosperity a curse rather than a blessing?

Great changes will be needed in farm methods to meet the new and threatening conditions. Labor shortage will require large investments in carefully selected labor saving machinery. The prospective shortage and very high prices of fertilizers (especially nitrates) suggest an increase in live stock, the universal employment of cover crops and the saving and utilization of all animal manures, leaves and woods surf on the farm. Diversified farming and a reduction of the cotton acreage must come in North and South Carolina to prevent great disaster from the approaching boll weevil.

In order to do his full duty to his business and his Nation, the farmer should look the situation squarely in the face and at once take steps to meet it. Both money and thought will be required to meet the new conditions and the surplus dollars must be put aside and wisely used.

We send out this catalogue with a deep sense of our responsibility to our customers and a desire to help them in every way to meet new and constantly changing conditions, and to discharge their full duty to the Nation during these times of stress. We trust that our facilities for serving them will be utilized to the utmost. Our great store of experimental data accumulated during years of patient, accurate and scientific work qualifies us

GUARANTEE

COKER'S PEDIGREED SEEDS are pure bred to pedigree by the plant-to-row method, each strain of seed being the product of one or a group of tested plants, and are true to name and type. **COKER'S IMPROVED SEEDS** are pure bred by general or mass selection, and are highly productive and true to name. **COKER'S GENERAL SEEDS** (those not otherwise classified as **PEDIGREED** or **IMPROVED**) are not bred by us but otherwise are as good seed as can be obtained.

to answer intelligently inquiries upon a variety of practical subjects. It is always our pleasure to answer promptly such inquiries and to give the maximum of free service for the upbuilding of Southern Agriculture.

Yours for National Service,

PEDIGREED SEED CO.

By **D. R. COKER,**

President

GUARANTEED

Every bag of **COKER'S SEEDS** carries a card on which is printed the percentage germination and physical purity of that bag of seed. In case any lot or bag of **COKER'S SEED** is not satisfactory to **YOU**, after you have examined and tested them for ten days, you may return them to us in the original packages at our expense and we will refund your money.

Our Method of Seed Breeding

The plant-to-row method of breeding which we have adopted is recognized by all plant breeders and experiment stations everywhere as the best method of crop improvement. The plant breeder, like the animal breeder, must make the individual the unit of selection, and in this plant-to-row method, as the name implies, this idea is carried out. The plant-to-row method, in a few words, means just this: Testing individual plants in separate rows, as near as possible under identical conditions of soil preparation, fertilization and cultivation; noting all the qualities throughout the season, harvesting or threshing each row to itself and recording the yields, qualities and characteristics of each. By this method only it is possible to identify the inherent qualities of the individual plants, and to isolate those valuable high-yielding plants which, under the same conditions and in competition with other plants, have proven their superiority and the ability to reproduce their high-yielding qualities.

This method of **proving the individual plant**, and then increasing and testing its progeny for three years, giving it a traceable pedigree back to the individual plant, is **our method**, and we offer for sale as "Coker's Pedigreed Seed" only the seed from these plants that have proven their value for four years by a high performance record.

In increasing these Pedigreed Seed for the public, we are ever mindful of the fact that even in the best bred plants there are always natural variations away from the original type, and in order to keep our seed up to standard, we are careful to go over our increase blocks and discard those plants that vary seriously from type.

All seed we sell, unless stated to the contrary in catalogue, are grown under our own personal supervision so that we take no chance as to the quality of the product we offer. Not only do we practice great care in the production of our seed, but also in the handling after production, this being just as essential.



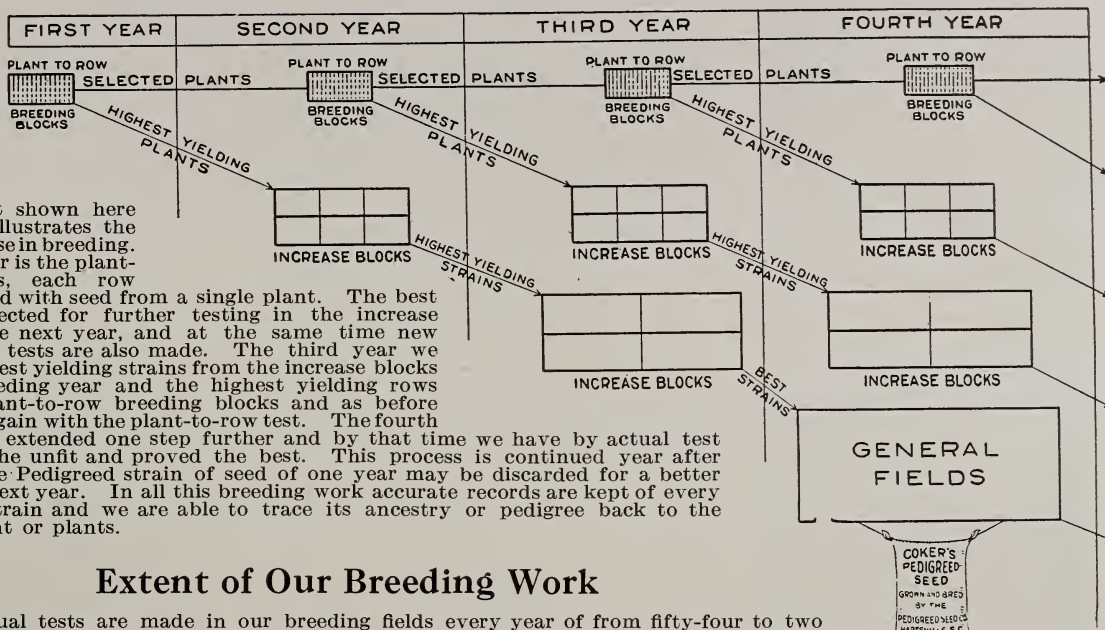
Small breeding plots of grain on Pedigreed Seed Breeding and Experimental Farms

Why Are "Pedigreed" Seed Better Than Other Seed?

Because they are produced by testing many plants, and only those which show up best in the tests and run true to type are used as parents. All the others are discarded. If you had fifty horses, and tested them against each other, you might find four better than the rest. Then by breeding those four, and testing their progeny, you might find that the progeny of one of them was better than all others. If continued for several generations, breeding toward a pure type, you would in time have a horse that was pedigreed and one that was better than the progeny of all others with which you started. This is what we do with seeds. Every plant differs from all others just as people or horses differ. They may look almost exactly alike, but one of them may prove to be the parent of a strain of seed that will greatly outyield the other. The only way to know is to test them. That is what we do. And sometimes it takes five hundred tests to produce a single pedigreed strain that is distinctly better than the rest.

We never offer seeds as "Coker's Pedigreed" until they have been bred and tested for at least four years and have made a performance record against other varieties that makes them worthy of our stamp of approval

Our Breeding Method Graphically Illustrated



The chart shown here graphically illustrates the method we use in breeding. The first year is the plant-to-row tests, each row being planted with seed from a single plant. The best rows are selected for further testing in the increase blocks of the next year, and at the same time new plant-to-row tests are also made. The third year we test the highest yielding strains from the increase blocks of the preceeding year and the highest yielding rows from the plant-to-row breeding blocks and as before begin over again with the plant-to-row test. The fourth year this is extended one step further and by that time we have by actual test eliminated the unfit and proved the best. This process is continued year after year and the Pedigreed strain of seed of one year may be discarded for a better strain the next year. In all this breeding work accurate records are kept of every individual strain and we are able to trace its ancestry or pedigree back to the original plant or plants.

Extent of Our Breeding Work

Individual tests are made in our breeding fields every year of from fifty-four to two hundred and seventy selections from each of the varieties we are breeding. These tests are conducted with scientific accuracy and complete records kept of each individual plant. A single page in our record book giving data on thirty-three plants of oats, contains ninety-nine separate field notes, two hundred and ninety-seven individual reports of yields, and two hundred and sixty-four calculations based on these reports—a total of six hundred and sixty entries on a single page. And all these figures and notes may only reveal one or two strains of seed that are worthy of further testing. **About ninety-nine per cent of all our breeding work is discarded, but this is necessary in order to determine the one per cent best.**

Our Variety Tests

Our variety tests include nearly two hundred of the principal varieties of the South's leading field crops. Seed are, whenever possible, obtained from the producer or originator of the variety or strain. These tests are conducted with exactness and impartiality.

It is this comparative test, carried on year after year, that finally determines the real value of a variety of seed.

Our Farms

Our farms consist of more than twelve hundred cultivated acres, all of which is devoted to the production of our fine seeds with the exception of the necessary feed crops and cover crops. This acreage, however, is entirely insufficient to meet our requirements and we have, therefore, found it necessary to use several additional farms operated under our direction for seed production. We sell no Pedigreed or Improved seed except that raised from our own planting stock, and even though our stocks are exhausted at times, **we will not purchase seed even from customers who bought seed from us the year before** to fill our orders. It is only by this exclusive method that we are able to guarantee the purity and high quality of all seeds we sell.

Our Experimental Work

In addition to our regular breeding work, we carry on each year experiments that have to do with actual everyday farm problems; experiments to determine the

most profitable ways of crop production and farm procedure; experiments to determine how a farmer can make the most from a given crop or crops.

Every farmer should put this test to every farm operation or farm problem that he has to face—**Does it pay?** The answer to this question is found only in experimental records. Such is the test we are putting to some of these problems and the results we publish (in brief) for the benefit of all who may wish to profit by our experience. If you are interested in these results, write us for Educational Bulletin No. 21—it is free.

Our Plant

Our plant consists of a Large Cotton Ginning Plant, a Seed Cotton Receiving House, a Planting Seed Storage House and our large Seed Breeding and Storage Warehouse. Our main seed Warehouse is a three story frame building, consisting of Storage Rooms, Seed Bins, Shipping Rooms, Laboratories, Plant Breeding Rooms, Germination Rooms, Fumigating Rooms and General Executive Offices. It was designed after a careful study of seed houses over the South and Central Western States and we believe it unsurpassed in the South for handling field seeds. The equipment consists of modern seed cleaning machinery, especially designed Corn Nubbing Machinery, Automatic Weighing Machines, and other equipments necessary to give a maximum of efficiency in every detail. So complete are our facilities for handling orders and making shipments that we are able in practically every case to fill every order the same day it is received.

Our Method of Handling Seed

Recleaning and Grading.

In addition to our requirements of proper breeding of seeds, we demand also that our seeds shall be sound, vital and properly graded. No matter what the breeding or pedigree of the seed may be it is an inferior product if it is full of trash, immature seeds and broken grains. For several years we have been conducting accurate tests to determine the value of well graded seed. While we have always believed that there was a great difference in favor of well graded seed, the results obtained were far beyond our expectations. With oats, for instance, we have found in a three years' test an increase of seventeen bushels to the acre from carefully graded seed against other seed of the same kind just as it came from the threshers. **Other crops show results equally as impressive.** These facts lead us to the assertion that Southern farmers could increase their yields on all field crops from ten to fifteen per cent by planting only well graded seeds. It is to be hoped that Southern farmers will accept these results (which are similar to the results obtained by several government experiment stations) and act on them.

A POINT TO KEEP IN MIND.

It is not enough that seed be simply called "recleaned." To say that a seed is recleaned does not mean that it is of first grade. Recleaning seed ordinarily means that the trash and dirt has been removed. This "recleaning" does not greatly effect the yield. But when seed are properly graded, it means that all the light, immature and broken grains are removed as well as all trash and foreign substance. It is, of course, quite expensive for a seedsman to thoroughly grade his seed and discard all of the lower grades, as the discarded part cannot be used except for feed purposes. But the difference in actual value of well-graded seed is so great that farmers everywhere should insist that all seed they buy should be carefully and properly graded.

OUR SEED CLEANING DEPARTMENT

is operated under this instruction: "Every lot of seed must be recleaned and graded, removing all light, immature and broken seeds and all trash, dirt and foreign matter. It is better that a small proportion of good seed be thrown out than to allow any inferior seed to go in." This rule is rigidly enforced even though it means at times a large loss to us. In grading oats for instance, we sometimes remove twenty-five per cent in order to bring the product to the high standard of our requirements. Our large machine on which most of our seed is graded, is a double-decked, four-screen vertical air-blast machine of the most approved type, and does as perfect work as any similar machine to be found.

THE PHOTOGRAPH HERE SHOWS HOW WE CLEAN AND GRADE ABRUZZI RYE

No. 1 shows the first separation. Here is removed all the large trash, stalks, immature heads, etc., that passed through the threshers. No. 2 is the next largest trash that evaded the first screen but is caught by screen No. 3. No. 3 is dust and sand. It is removed by a large revolving fan. Thousands of dollars are paid out every year by farmers for just such dirt as this, when they buy uncleaned seeds. No. 4 shows the lowest grade of grain. It is practically nothing but broken grains and small trashy particles. It represents a dead loss to buyers of uncleaned seed. No. 5 is the second grade of seed. This grade is not usually removed by seedsmen, for it contains many whole grains. They are light and immature, however, and will not produce healthy plants. It is only by discarding this grade of seed that the highest grade can be obtained. No. 6 is the final product obtained after removing the other five grades of grain and trash. **This is the only grade we use for seed purposes**—as nearly perfect as mechanical ingenuity can make it. This photograph represents what WE mean by recleaned and graded seed. All of these are actual photographs of samples taken from the machines, and not made up specimens.

Our Men

From the very nature of the work, pedigree plant breeding can be entrusted only to high salaried experts, men who have scientific knowledge and practical experience in the special field of plant breeding. We are fortunate in having a corps of experts in our continuous service, men who have been with us several years.

Our Mr. David R. Coker is known over the entire South as an Agricultural and Plant Breeding Expert of high rank. He is also recognized as the founder and chief exponent of new Upland Staple Cotton Industry of the Carolinas.

Our Mr. S. Pressly Coker, Plant Breeder, is a graduate of Virginia Polytechnic Institute and Cornell University Agricultural College and is an expert in Plant Breeding whose achievements are well known. He has published numerous articles and addresses along agricultural lines that have had wide circulation.

The work of the Pedigreed Seed Company—the Distribution Department of the Pedigreed Seed Breeding and Experimental Farms is in charge of our Mr. A. L. M. Wiggins, a graduate of the University of North Carolina, who is a trained expert in this line.

Tested for Germination and Purity

No matter how well bred or carefully handled a seed may be, its value for planting is only in proportion to its germination percentage. If a seed will not sprout, it is naturally of no value. Seed germinating 50% are worth not more than half as much as seed germinating 100%. In order for us to know and to determine accurately the germination of our seeds, and to prevent any lot of seed low in vitality being shipped to our customers, we found it necessary to install at much expense in our laboratory the most approved type of Electric Germinator. In adopting this apparatus, we have followed the lead of the U. S. Department of Agriculture at Washington. Heat for this germinator is furnished by an electric hot plate and the temperature is lowered by the use of an ice box. An electric thermostat regulates the heat and sustains an even and regular temperature at any degree required. Samples of every lot of seed we handle are tested with this apparatus and the percentage of germination accurately determined.

We would not have installed such an expensive apparatus nor would we go to the trouble and expense of testing all of our seeds if we were not thereby better serving the interests of our customers.

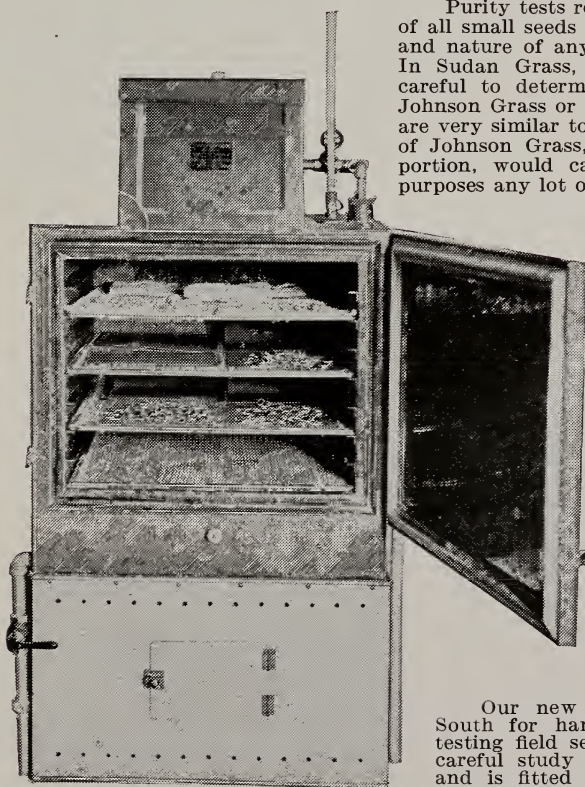


Expert in our laboratory examining clover seed under microscope to determine presence of weed seeds and other impurities.

Purity tests require a microscopic examination of all small seeds and a determination of the kind and nature of any impurities that may be found. In Sudan Grass, for instance, we are especially careful to determine the presence or absence of Johnson Grass or Sorghum Hybrids; both of which are very similar to pure Sudan seed. The presence of Johnson Grass, no matter how small the proportion, would cause us to throw out for seed purposes any lot of Sudan.

On every bag of seed a tag is attached which gives in figures the actual percentage of germination and purity above which we guarantee that particular bag of seed. These figures are based on our tests. Any failure of the seed to prove up to the figures we give lays us liable under the State Seed Inspection Laws. The value of such information and the laws behind them is apparent. Although the State Department of Agriculture makes no standard requirement of quality for seeds, **our own standards are equal and above the high standards recommended by the state authorities.**

Our new warehouse is unexcelled in the South for handling, grading, recleaning and testing field seeds. It was designed after a careful study of seed houses in several states and is fitted out with the most modern and highly perfected machinery to be found. We are therefore able, usually, to fill every order the day it is received.



Most Approved Type Electric Germinator



This trade-mark is the honor badge of distinction which we put on our finest seeds. It represents our highest attainments in plant breeding—the stamp of approval we place on seeds that have proved their superiority over all other seeds of the same variety. Any bag of seeds bearing this “stamp of distinction” is backed by an unreserved money-back guarantee of high quality which we stand behind with a substantial commercial backing and a fifteen years' reputation as expert breeders of highly productive seeds. Our Pedigreed Abruzzi Rye carries this trade-mark and customers are warned not to accept any seeds as “Coker's Pedigreed” unless the bag bears the trade-mark shown above. It is your insurance policy against inferior seeds. Other people use our name and our reputation to sell their seeds, but they cannot use our trade-mark, as it is protected by law. Look for the heart.

New Strain Coker's Pedigreed Abruzzi Rye

**The South's Wonderful Winter Crop for Grain Yield, Cover Crop
and Grazing Purposes.**

**A new strain of Abruzzi Rye, more productive than the parent
pedigreed strain.**

A new strain of Abruzzi Rye. A strain of seed more productive than Coker's Pedigreed Abruzzi. An accurate four year test shows an increase yield of this new strain of rye over the finest stock of Coker's Pedigreed Abruzzi of 3.3 bushels per acre. We call this rye **New Strain Coker's Pedigreed Abruzzi Rye.**

Careful Breeding Produces Results. Our original breeding work with Abruzzi Rye by the plant to row Pedigree method gave an increased yield over the original Government strain of this rye of 25% and our latest breeding work has now resulted in an additional increase of nearly 10% over our own finest stock.

Last year we sold a few bushels of this **New Strain** rye and its superiority in comparison to our finest rye produced up to that time has been so marked even to a casual observer that a heavy demand for this **New Strain** has already developed.

This new strain of Abruzzi is also more rust resistant than any other strain we have developed, and while none of our seed of the old strain has ever shown any great susceptibility to rust, the new strain is almost entirely free from it.

Popularity and Use of Abruzzi Rye

Probably no new variety of a Southern staple crop has ever earned so quickly a permanent popularity and has shown such a marked superiority over other varieties as Coker's Pedigreed Abruzzi Italian Rye. Since our commercial introduction of this variety in the fall of 1913, Abruzzi Rye has been planted in every Southern State and its use has been limited only by the supply of seed.

Coker's Pedigreed Abruzzi Rye is used for three valuable purposes: First, for grain yield. Under average conditions it will make two or three times the yield of most native varieties. Second, for grazing purposes. It yields, on good soil, from three to four tons of succulent green forage per acre for winter grazing. Third, as a cover crop. Planted in cotton middles after the first picking, it makes a heavy winter growth in time for spring plowing, preventing the soil from washing and leaching through the winter.

Abruzzi or Italian Rye was discovered by agents of the United States Department of Agriculture, while on an exploration trip through Italy in search of valuable plants for use in this country, and was introduced for the first time in the United States about January, 1900. It came from Naples and brought with it this record: "Abruzzes, a superior rye grown in the Abruzzi Province, a mountainous district east of Rome. This strain is one of the best grown in Italy, having made an average yield of 28.2 bushels per acre for a period of ten years."

This rye was tested by the United States Department of Agriculture, found to be valuable and was distributed in 1906 and 1907, but for some reason it seems to have been almost lost sight of until improved and introduced again as Coker's Pedigreed Abruzzi Rye in the fall of 1913. Since the superiority of this rye has been proved, other seedsmen and growers are offering it for sale. Coker's Pedigreed Abruzzi Rye, however, can be obtained only from us.

Coker's Pedigreed Abruzzi Rye is descended from one plant from a field of this general Abruzzi Rye selected in the spring of 1909, and tested alongside of a number of other selected plants from the same field. This plant indicated its good qualities by a high yield of 66.2 bushels per acre in 1910, under test plot conditions. Further tests of the progeny every year since then has shown an increase of yield from this strain of about twenty-five per cent above the general Abruzzi. Thus, by the plant-to-row pedigree method, we increased the yield to the extent that we entirely discarded the original strain of seed.

Now we have discarded the original Pedigreed Strain for the **New Strain** Pedigreed Abruzzi. This **New Strain** of Coker's Pedigreed Abruzzi Rye is descended from a selection of the parent Pedigreed Strain made in 1913. For the past five years this progeny has proved more uniform and more productive than its parent. The Pedigree (or performance record) of this New Strain, as shown by our Test Plot Records, gives it an average grain yield during the years 1913, 1914, 1915 and 1916 of 46.7 bushels per acre. (General field yields will, of course, be lower.)

More uniform, more productive and more disease resistant are the qualities which commend this New Strain of Abruzzi Rye. We confidently assert that there is no strain of Abruzzi Rye which has thus far been bred or produced for planting in the South that will make as good yield of as high quality product as this **New Strain** Coker's Pedigreed Abruzzi. Every farmer who grows rye, whether one acre or a hundred acres, should secure at least enough of this highly productive **New Strain** seed to grow his own seed for his entire crop the next year. Don't be satisfied with inferior stock when the **best** can be had at a slightly higher cost.

PRIZE WINNING SHEAF
Coker's Pedigreed Abruzzi
Rye Has Twice Won the
World's First Prize at
National Expositions.

PRICES: NEW STRAIN Coker's Pedigreed Abruzzi Rye, per bushel,
\$4.00; 10 bushels and above at \$3.75; ½ bushel, \$2.25; peck, \$1.25.

Coker's Pedigreed Abruzzi Rye

A MOST VALUABLE WINTER COVER CROP FOR LIGHT SOILS

For cover crop purposes only, Coker's Pedigreed Abruzzi Rye is the most valuable crop we have for light lands and for conditions where leguminous crops will not thrive or where the land is required for spring planting before the clover crops have attained a full growth. Vetches, clovers and other leguminous crops are also recommended for cover crop purposes, but the fact that these crops in the South do not make a heavy winter growth before time for plowing, makes them of less value than a heavier, earlier growing crop. Compared to native varieties of rye, Coker's Pedigreed Abruzzi makes at least double as much cover crop growth. After many years of experiment on our own farms, and from experiments conducted by hundreds of the larger farmers all through the South, we are convinced that Coker's Pedigreed Abruzzi Rye is the best winter cover crop for general purposes in the South. It is easy to plant, grows on all kinds of soil, thrives in the poorest sandy soils where other crops fail, requires no inoculation, makes a heavy early growth, conserves humus in the soil, prevents leaching and washing of soil by the winter rains, and restores plant food to the soil—these are the chief advantages of Coker's Pedigreed Abruzzi Rye as a winter cover crop.

South Carolina Experiment Station Advises.

Clemson College, S. C., July —.—Humus is the crying need in Southern agriculture. There is no reason why all otherwise idle lands should not be sown to rye in September and October to furnish this humus most cheaply and most abundantly from year to year, and in addition to furnishing humus, it conserves plant food that would otherwise leach out of the soil and be lost. Such a cover crop, furthermore, prevents land from washing, which means a heavy loss to all hill and rolling land.

Abruzzi rye is the best known variety for this purpose, as it makes a rapid, vigorous growth, and makes it earlier than any other crop on ordinary lands.

With rye, there is no inoculation problem—just a negro job of scratching about one bushel per acre in the cotton rows, corn rows, and on the pea stubble in September and October. Even when clover or vetch is used as a cover crop, rye should be sown with them; for humus is our greatest need, and the two crops together will furnish more of this material than either one growing alone.

Rye, furthermore, paves the way for easier success with all winter legumes in that it supplies the soil with humus, which always makes easier the inoculation of the land for the legumes. During July and August put your surplus money in **Rye**—not the bottled variety, but the **bagged** article.



Here are shown two young plants of rye. Both seeds were planted at the same time. They were planted side by side in the same soil, they were fertilized alike, they were cultivated alike, they were pulled up at the same time, they were photographed side by side and they were treated in every way identically alike.

One is Coker's Pedigreed Abruzzi, the other is a native winter rye. The Abruzzi is earlier (as you see) stools better, is better for grazing (grows upright and does not trail) and makes twice as much forage as the other. Native ryes are gradually being replaced by Abruzzi all through the South.

Coker's Pedigreed Abruzzi Rye.

Native Winter Rye.

The greater part of the seeds we sell are raised on our own farms of more than twelve hundred cultivated acres. Every detail of this work is personally supervised by experts. The seeds of our varieties not produced on our farms are raised by the most reliable planters in this section from seed which we furnish them and all the work of planting, cultivating, selecting, harvesting, etc., is done under the direction of our head plant breeder. The right is reserved by us to reject any part or all of any crops which are not absolutely satisfactory.

COKER'S PEDIGREED ABRUZZI RYE

A Combination Winter Cover Crop and a Nutritious Winter Grazing Crop

THE value of any grazing crop depends on quality, quantity and availability. The quality of Coker's Pedigreed Abruzzi Rye is among the highest of all grazing crops. (We do not recommend it as a hay crop.) An analysis made by responsible chemists of dry samples of this rye cut during the growing period gave the following results: Water 5.45; ash, 9.36; protein, 21.10; crude fibre 22.43; nitrogen free extract, 37.55; fat, 4.10. The chemist's report: "We were surprised at the very high percentage of protein found, almost twice as high as that in alfalfa and as high as some low grade cotton seed feed meals which are on the market. It is nearly two-thirds as much as the average cotton seed meal will show." Comparing Abruzzi rye forage with timothy, hay, Kentucky blue grass hay, red clover hay, alfalfa hay, soja bean hay, pea vine hay, vetch hay, peanut vine hay, and wheat straw, the chemists say: "It is hardly necessary for us to state, that in our opinion, the Abruzzi rye forage is greatly superior in feed value to any of the other materials given." The quantity of forage growth of Coker's Pedigreed Abruzzi Rye is high, averaging three to four tons of green forage per acre, on good soil. We know of no other winter crop that will give as much winter grazing as this rye. It grows upright, stools heavily, and does not lie flat or trail on the ground, all of which makes it easy for animals to graze. Cattle relish this green winter crop and will leave dry hay for it. Every winter, we graze a large herd of Herefords on an Abruzzi rye cover-grazing crop, and feed them little else but oat straw, for roughage.

As a combination winter cover crop and grazing crop for the South, Coker's Pedigreed Abruzzi Rye has no equal. Planted in the cotton fields immediately after the first pick-



PART OF OUR HERD OF HEREFORDS GRAZING A COVER CROP OF ABRUZZI RYE PLANTED IN COTTON

ing, this rye quickly makes a heavy growth, and by December or January is ready for grazing. Ordinarily, two to three months grazing can be had before time to plow under the rye for spring planting of other crops. Two purposes are thus filled: First, A cheap and nutritious green crop is provided for the cattle during the winter months; and, Second, A cover crop protects the land from washing and leaching by hard winter rains and conserves the fertility of the soil.

Chemist's Report on Coker's Pedigreed Abruzzi Rye

Forage with Comparisons

COMPARATIVE ANALYSES

Feeds of Low Percentage Moisture

MATERIAL	Water	Ash	Pro-tein	Crude Fibre	Nitro-gen Free Ext.	Fat	MATERIAL	Water	Ash	Pro-tein	Crude Fibre	Nitro-gen Free Ext.	Fat
Rye Forage, Average of Five Samples from Pedigreed Seed Co.	5.45	9.36	21.10	22.43	37.55	4.10	Alfalfa Hay	8.40	7.40	14.30	25.00	42.70	2.20
Timothy Hay	13.20	4.40	5.90	29.00	45.00	2.50	Soja Bean Hay	11.30	7.20	15.40	22.30	38.60	5.20
Kentucky Blue Grass Hay	21.20	6.30	7.80	23.00	37.80	3.90	Pea Vine Hay	15.00	0.70	13.70	24.70	37.60	2.30
Johnson Grass Hay	10.20	6.10	7.20	29.50	45.00	2.10	Vetch Hay	11.30	7.90	17.60	25.40	36.10	2.30
Red Clover Hay	15.20	6.20	12.30	24.50	35.10	3.30	Peanut Vine Hay, without Nuts	7.60	10.80	10.70	23.60	42.70	1.60
							Wheat Straw	9.60	4.20	3.40	38.10	43.10	1.30

Feeds of High Percentage Moisture.

Above Rye Analysis Figured on basis of Moisture in Growing Rye.	Water	Ash	Pro-tein	Crude Fibre	Nitro-gen Free Ext.	Fat
	76.60	2.30	5.25	5.55	9.30	1.00
Green Corn Podder	79.30	1.20	1.80	5.00	12.20	.50
Corn Silage	79.10	1.40	1.70	6.00	11.00	.80

"With this information before you, it is hardly necessary for us to state, that in our opinion, the rye forage is greatly superior in feed value to any of the other materials given.

"The protein is very much higher than in any of the other feeds given. The protein is really the valued part of any feed. It is the nitrogenous matter that builds up the muscle. It corresponds to amounts in fertilizers. We were surprised at the very high percentage of protein found, almost twice as high as that in alfalfa and as high as some low grade cotton seed feed meals which are on the market. It is nearly two-thirds as much as the average cotton seed meal will show.

"The nitrogen free extract is unusually high for forage and in connection with the fat, it is the fat producing ingredient of the feed. The percentage of fat is only exceeded by the Soja bean and peanut vine hay. As stated above, the fat is worth as much as the protein in a well balanced ration.

"Wishing you much success with the introduction of this valuable feed, we beg to remain,"

Yours very truly,

THE PICARD-LAW COMPANY,

Consulting and Analytical Chemists, Atlanta, Ga.

Remember !!!

The Strain of Coker's Pedigreed Abruzzi Rye we are distributing this year is a NEW STRAIN—the most productive Abruzzi Rye ever produced. No other seedsmen nor seed house has a bushel of this NEW STRAIN of Abruzzi. Don't invest money in an inferior discarded seed of Abruzzi, but send to HEAD-QUARTERS and get the best.

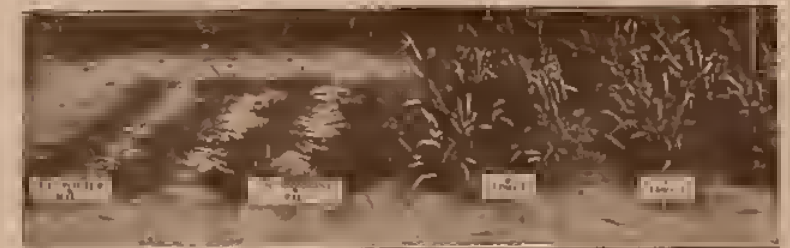
The Grain Yield of Coker's Pedigreed Abruzzi Rye

The superiority of Abruzzi Rye for grain yields is without question. Under identical conditions of soils, fertilizers and cultivation, we have year after year in carefully conducted tests found our Pedigreed Abruzzi to double and triple the yields of other varieties. On good cotton land in average years we usually make twenty to thirty bushels per acre, which compares very favorably with the average Southern yield of 11.3 bushels. It is only necessary for farmers to plant a field of Abruzzi by the side of a native variety to have a demonstration of the superiority of Abruzzi to yield and plant growth. Our NEW STRAIN Pedigreed Abruzzi made ten per cent more yield than the old strain.

Seeding Coker's Pedigreed Abruzzi Rye

FOR COVER CROP AND GRAZING PURPOSES

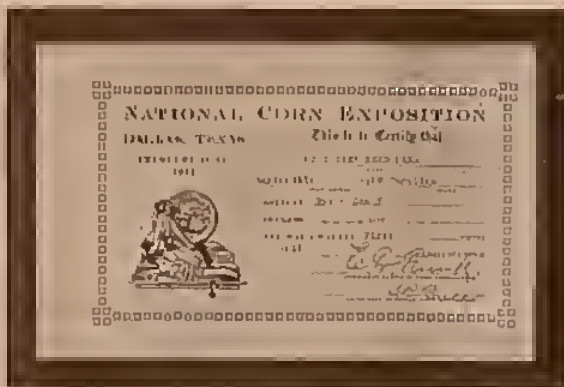
Coker's Pedigreed Abruzzi Rye should be sown from September 15th to October 15th for best results as a cover crop or grazing crop. If sown earlier than September 15th, the young plants are very apt to be killed by the hot sun, and if sown much later than October 15th, the plants will not have time to make their best cover crop growth before time to turn them under. We recommend planting in cotton fields after the first or second picking. Sow the rye broadcast between the rows, and cover under with a large sweep, one furrow to the row. The rate of seeding for a cover crop should be about one bushel to the acre. For grazing purposes, two bushels to the acre will give better results.



All planted at the same time and fertilized alike.

FOR GRAIN PRODUCTION

For grain production we recommend seeding with a grain drill from the 1st to the 15th of November to the upper half of the cotton belt, and two weeks later in the lower half. This rye is considerably earlier than our native varieties, and if planted earlier than this, it will head out very early in the spring, and may be injured by cold weather. We prefer planting here as near November 15th as possible, and advise a strict adherence to the above rule for best results. After conducting experiments for several years, we find that a seeding of one-half bushel per acre on good soil and three-fourths bushel per acre on light soils, for November 15th planting, will give best grain yields. Very late plantings, however, will not give satisfactory results. Of course, these light seedings require a good seed bed, and we advise a thorough preparation of the land before planting. Break and harrow your land thoroughly, and use a grain drill that will plant a small amount of seed to the acre.



This Award speaks for itself. COKER'S PEDIGREED ABRUZZI RYE—CHAMPION RYE OF THE WORLD

Coker's Pedigreed Red Appler Oats

Most Productive Pure Bred Oats for the Southern Farm

The verdict of hundreds of planters of Coker's Pedigreed Red Appler Oats substantiate fully the claim we have made: That year in and year out, Coker's Pedigreed Red Appler Oats will make a bigger yield than any other variety planted in the South, under the same conditions. Accurate reports show that more than ninety per cent of the farmers who planted both Coker's Pedigreed Red Appler Oats and any other variety last year made from five to twenty bushels per acre more from Coker's Pedigreed Red Appler. The other ten per cent who made less, planted Fulghum, and their success with Fulghum was due to seasonal conditions which were favorable to the earlier variety. The above **facts** count. They are not claims, they are not even tests conducted by us, but **they are actual results obtained by customers all over the South.**

Appler Oats have been planted in the South for many years with good results. This variety descended from a few selections made by a man named Appler from a field of Texas Rustproof Oats many years ago and was named for him. It was more productive than its parent and became very popular.

THE ORIGIN OF COKER'S PEDIGREED RED OATS

goes back to a field of Red Appler Oats harvested in the spring of 1909, and the beginning of our breeding work was in the spring of 1908, when plant selections were made for our 1909 test plots. In 1910, two unusually high yielding strains were produced in our breeding plots, and these were later tested and found to be superior to any oats produced up to that time.

Since then, we have continued breeding these strains and have offered the progeny of our most productive pedigreed strain to the public. During this time, we have tested over three hundred selections and strains of these oats, in our work of breeding and perfecting the seed we are now selling as Coker's Pedigreed Red Appler Oats. The success of our customers with these oats has been so uniformly satisfactory, and the profits they have made from planting our highly productive seed, so substantial, that the demand has exceeded our supply of seed every year but one, since we offered the first bushel for sale. Many customers buy every year enough pure, fresh seed from us to plant their entire crops, while others buy only enough to raise a seed crop for their own seed for another year. This method we commend to every farmer who wants the best seed at a very low cost.

DON'T

confuse Coker's Pedigreed Red Appler Oats with the ordinary Appler. They are as distinctive from the Appler as the Appler is from the Red Rustproof. Coker's Pedigreed Red Appler Oats are earlier, make a much heavier yield, are more uniform, and make a better quality grain than the old Appler. They are smut free. All planting seed is treated with formaldehyde solution to kill any spores present.

PRICES: Coker's Pedigreed Red Appler Oats, per bushel, \$2.50; 20 bushels and above at \$2.40.

TIME AND METHOD OF SEEDING OATS

The time and method of seeding oats varies considerably in different sections of the South, and very often it varies in a particular section, depending of course, upon the purpose for which the crop is intended, the variety of oats planted, weather conditions, and so on. While it is true that oats are planted for different purposes, they are best suited for grain, and are generally planted for such purpose; so in considering the time and method of planting we refer to the grain crop.

Although the time of planting does vary in any given section, there is a best average time for planting, and every farmer should try to ascertain the best time for his particular section, and try to plant as near that time as possible every year. For this section of the South, our experience seems to show that seeding from the 15th to the 30th of November will give best average results, especially when a light seeding per acre is used.



Prize Winning Sheaf

Coker's Pedigreed Red Appler Oats have twice won Sweepstakes Prize over all Southern Oats at National Expositions.

For many years almost every farmer seeded his oats by hand, broadcast. As soon as the corn crop was gathered, his land was broken, the oats sown broadcast, and harrowed in. This method had its disadvantages; a very serious one being that often there was much winter killing. The little plants came up on the level, and had no protection from the cold winds. The method of planting with a drill is today being used on most up-to-date farms. The open furrow method is popular and effective in some sections, but is not so economical of labor and seed as the drill method. We recommend planting with a drill after the land has been thoroughly prepared, and we have never lost a crop of drill-planted oats by winter killing.

Coker's Improved Fulghum Oats

This year we are offering Coker's Improved Strain of Fulghum Oats. Beginning with pure seed of the best strain of Fulghum Oats we could obtain, we have by mass selection produced a pure type and a higher yielding strain of this oat. Our seed crop of this Improved Fulghum made a yield last year but two bushels short of our finest breeding block of the latest strain of Coker's Pedigreed Red Apple Oats. Made the highest yield in our variety test last year over twenty-two principal varieties and strains of Southern Oats. We believe there is no strain of these oats in the South superior to Coker's Improved strain.

The Fulghum Oat is admitted by growers and breeders to have earned a permanent place as a valuable variety for the South. Being two weeks earlier than other varieties, it is especially valuable to the large planter in extending his harvesting period. Its earliness also makes it work in rotation with corn to better advantage than the later varieties.

On the average, Fulghum Oats will not yield so much as Coker's Pedigreed Red Apple, though in some cases, on account of seasonal conditions, Fulghum makes a heavier yield than any other variety. We recommend, therefore, that about one-third of the crop should be planted in Fulghum and the balance in Coker's Pedigreed Red Apple.

Our seed of this variety is improved by selection, is carefully re-cleaned and graded, and guaranteed for 95% germination, 99% physical purity and trueness to name. We are confident that no better seed of this variety has yet been produced in the South.

PRICES: Coker's Improved Fulghum Oats, per bushel, \$2.40; 20 bushels and above at \$2.30.

Rate of Seeding Oats

The question of how much seed to sow to obtain best results is one of very great importance. It is not uncommon to find farmers who plant as much as five bushels of seed per acre, but perhaps the majority of them plant from two to three bushels per acre. If you will examine a field of oats seeded at the rate of five bushels per acre, you will at once notice that the plants are very thick. Some plants will be high, others low, showing that there is competition between the plants. At harvest time you will notice that many of the plants are undeveloped, the heads are small, the grains light, and the yield and quality low. If you now examine a field with a light seeding per acre, you will notice that each seed has produced a plant with a number of stems; there has been no competition between the plants; each plant has developed into its best; the stems are many, the heads heavy, and the yield large.

Observing this fact, we begin a set of experiments to determine the best rate of seeding to use for heaviest yields. These experiments began in 1910, and were carried out with the greatest care. All grains were placed and spaced in the test plots by hand, and everything was done with the greatest accuracy. For three years in succession the three-peck seeding gave best results, yielding an average of nine bushels per acre more than the six-peck seeding, and $3\frac{1}{2}$ bushels per acre more than the nine-peck seeding. We conclude, therefore, that the correct seeding per acre for good soils in this section, where drill planting is used, is about three pecks per acre. Our experiments lead us to believe that much less seed are needed on rich land than on poor, and while we recommend a seeding of three pecks on good soil, we feel that as much as two bushels per acre may be needed on soils of a light, sandy character. Of course, a **thin seeding** requires a **good seed** bed, as we have already recommended.

Why Can't I Breed My Own Seeds?

You can do a certain amount of seed selection very profitably, and this we recommend. But, to produce a meritorious pedigreed strain of seed requires scientific training, patience, and often several years' work. Plant breeding is a highly specialized business, to which men devote their lives, and a regular farmer could not expect to get the same results as a professional plant breeder. Every farmer should do a small amount of general seed selection, picking his best ears of corn in the field for seed, his best watermelon, etc., but it is usually necessary and always desirable for him to buy every few years from a seed specialist a few pure bred seeds, in order to keep his production up to the highest. It would be too expensive for a farmer to attempt pedigree plant breeding on a large scale, as it often costs us as much as a thousand dollars to produce a single first bushel of a new highly productive strain of seed.

**EXHIBIT SHEAF COKER'S
IMPROVED FULGHUM
OATS**

Our results are accepted as authoritative. The Southern Farming editorially says: "The conclusions which he (Mr. Coker) comes to in regard to various crops, varieties, etc., are just as accurate and dependable as those of any Experimental Station anywhere. He is looked upon by all who know him as one of the best and most accurate experimenters with farm crops to be found anywhere, and when he says anything he has proofs to back his statements."

Seed Wheat

For several years we have been testing the principal varieties of wheat to determine which varieties gave most satisfactory results under Southern conditions. After a number of tests, three varieties proved better than all others: Leap's Prolific, Blue Stem and Red May. We then obtained the purest available stocks and began breeding work with them. Our first improved product we are offering this year for the first time: Coker's Improved Leap's Prolific. This strain of wheat is the product of individual selected beardless type heads and all off type heads have been carefully removed from the breeding blocks.

All our seed is recleaned and graded, tested and guaranteed for germination and purity. As we will sell only the crops produced from our own seed, our stocks are therefore limited and we will fill orders as received until the supply is exhausted.

VARIETIES.

Coker's Improved Leap's Prolific.—Pure bred by mass selection. One of the most productive wheat we have developed or tested. Our yields for the past two years under conditions below normal, in large fields, has been 28 to 30 bushels per acre. This variety is the most largely planted one in the Carolinas. A wheat of excellent milling qualities. Commercial strains usually contain a large proportion of bearded heads, but our Improved Strain is almost entirely free from the bearded type. Seed pure, recleaned, graded and tested.

PRICES: Coker's Improved Leap's Prolific Wheat, per bushel, \$3.75; 10 bushels and above at \$3.65; ½ bushel, \$2.00; peck, \$1.15.

Blue Stem or Purple Straw.—A splendid, early, productive beardless wheat. An old variety which is very popular throughout the South. Our seed is the progeny of a Government Pedigreed Strain and is therefore pure and of high quality.

PRICES: Blue Stem (Purple Straw) Wheat, per bushel, \$3.50; 10 bushels and above at \$3.40; ½ bushel, \$1.90; peck, \$1.05.

Red May.—A beardless variety that produces well throughout South Carolina. Our seed is from stock that has been grown in this section for many years. This variety is a favorite through South Carolina and Georgia.

PRICES: Red May Wheat, per bushel, \$3.50; 10 bushels and above, \$3.40; ½ bushel, \$1.90; peck, \$1.05.

TIME AND RATE OF SEEDING.

The following instructions are taken from a special bulletin issued by the Bureau of Plant Industry, U. S. Department of Agriculture:

"Wheat can be sown in the states bordering on the gulf over a rather long period extending from about the middle of October to the latter part of January. The best time for seeding is about November 1st in the northern part of these states, and November 15th in the central part. A good growth of the plant is necessary before cold weather begins, yet if the plant becomes jointed, injury from freezing may result. If seeding is delayed until late in the winter, sufficient winter growth is not secured and hot weather may cut short the growth and yields be reduced or entirely suppressed.

"The quantity of seed that should be sown under ordinary conditions in the cotton belt is 6 pecks per acre. This may be varied according to the size of kernel of the variety used, the condition of the seed bed, the fertility and character of the soil, and the date of seeding. When a drill is used for sowing and the grains are small, the seed bed in good condition, the soil rich, warm, and well drained, and the seeding early, 5 or even 4 pecks per acre are often sufficient. When the seed is sown broadcast and opposite conditions exist, 7 or 8 pecks may give more profitable results. It is advisable to adhere to these rules with all varieties, regardless of any claims of exceptional tillering ability that may be made."

Consider Well These Points

The seeds we offer for sale as our own strains represent the cumulative results of fifteen years' scientific work in selecting and breeding field seeds by the plant-to-row method. During this time our seeds have been planted and tested in every Southern state with results which have shown conclusively that Coker's Pedigreed Seeds make bigger yields and better quality than ordinary seeds.

We stand behind every seed we sell with our reputation and a guarantee that they are sound, true to type and of high germination. Actual germination tests are made with seed from every lot of seed we ship and any falling below our high standards are not disposed of as seed.

Sheaf Coker's Improved
Leap's Prolific Wheat

We are continually upbreeding the seeds we sell. Our plant breeding and experimental work with field seeds is, so far as we are informed, the most extensive of its kind carried on by any individual or firm in the cotton belt. The cost of this department alone is more than five thousand dollars a year. It is necessary, however, to do this work on a big scale, testing each year the seeds of hundreds of individual plants and increasing the seed of the best individual strains to get absolutely dependable results.

The value of pedigreed seeds depends on the scientific knowledge and painstaking care of the breeder. Anybody can increase the seeds from a single plant and have so-called "pedigreed" seed, but such seed may have no particular virtue. To make a truly valuable pedigreed variety, hundreds of plants must be selected, tested, and only the best strains increased and further improved, by men who understand the business thoroughly. We therefore entrust this work only to scientifically educated and experienced experts who have made plant breeding a profession.

Our Prices Are Higher [?]

Possibly, you have been thinking that you could buy seeds elsewhere for less money—if so, you are entirely correct. Our seeds usually sell for a few cents more a bushel than other seeds. The plain reason is that they are worth it. And the reason they are worth it is that we spend over five thousand dollars a year **breeding** our seeds for high yields and for a better quality product. You can buy "so-called" seeds that have not been upbred, seeds which the seller will tell you he does "not warrant as to description, quality, productiveness or any other matter" pertaining to his seeds, seeds which have been only half recleaned—yes, you can buy such seeds cheaper than you can ours. But we don't call such a product "seeds," we call it ordinary old feed stuff, masquerading as seed. That is the kind of "seed" we feed to our stock. Of course, it is cheaper than our high yielding pure bred, guaranteed seeds, but it's not fair to compare price without comparing quality also. And when you are planting a crop the few cents difference in price is mighty small besides a few bushels difference in yield.



A Breeding Field of COKER'S IMPROVED LEAP'S PROLIFIC WHEAT

Inoculation Necessary

Inoculation is generally accepted to be necessary for all clovers, including alfalfa. Soil inoculation is probably best, where it can be secured economically. This can be obtained by scraping the top soil from land that has already been seeded to the crop you are planting. Two to three hundred pounds to the acre of well inoculated soil should be sufficient to get your new field started. Where soil inoculation cannot be secured economically, artificial inoculation may be obtained by the use of prepared cultures. These cultures may be applied to the seed, and under favorable conditions, will greatly aid the growth of the plant. Such cultures may be obtained from the Department of Agriculture of some of the States or from us. See prices quoted on page 15. Full directions come with every package. Acid soils, however, should not be planted with crops requiring inoculation, as the acidity of the soil kills the culture. Acidity may be overcome by the use of lime, either in the form of ground limestone (which we recommend) or burnt lime.

Alfalfa

The profitable growing of Alfalfa in the South has been proven a possibility and many farmers are making a success with it. As a general crop for most farms, however, it is yet an experiment, but one which carries with it such possibilities that many farmers should intelligently attempt to grow at least a small plot. We do not recommend that any planter begin with alfalfa on a large scale because the expense of producing a crop is too great to take big chances. Before you decide to plant alfalfa, write to the United States Department of Agriculture, and your State Experiment Station for data and information about this crop.

Kansas grown alfalfa seed have proved superior to imported seed, and we have therefore secured stock grown in that state. We make germination and purity tests and also have official tests made, before selecting any lot of seed we offer. Much cheaper seed can usually be secured, but not of the quality that we can endorse and guarantee. With such a crop as alfalfa, it would be foolish to plant any but the best seed obtainable.

Seeding is usually at the rate of about 30 pounds to the acre, and the time recommended is between September 15th and October 15th. Inoculation is necessary. Either use some soil obtained from a field on which alfalfa or sweet clover has been growing, two to three hundred pounds to the acre, or artificial cultures, which can be obtained from us, or the United States or South Carolina Departments of Agriculture.

PRICES: Alfalfa, per pound, 29c; 10 pounds at 27c; 50 pounds and above at 25c. (These prices subject to change without notice.)



Cutting Alfalfa

Burr Clover

Burr Clover is an annual legume, chiefly used as a pasture crop and as a nitrogen gathering plant for enriching the soils. When planted with Bermuda grass, the combination furnishes a grazing pasture which is green almost the year around. Sow any time from August 1st to November, at the rate of about 50 pounds to the acre. The seeds come in small spiral burrs which assist in inoculating the soil. Once planted, each succeeding crop gives more luxuriant growth. When used as pasturage, no grazing should be allowed after blooming begins freely, in order to give seeds opportunity to mature. Every Southern farm should have at least a small field of this clover.

Our seed is double cleaned and is in as good condition as the nature of the seed will permit. It is practically impossible to remove all the trash. They are, however, as free from trash and impurities as any burr clover seed obtainable. Our seed were grown in South Carolina but not by us.

NOTE—Burr Clover seed usually contain a number of "hard" seed which do not readily germinate. A good plan is: First, dip the bag of seed in cold water; second, immerse it in boiling water for one to two minutes; third, dip seed again into the cold water. This process softens the hard coats of the seed and makes germination higher.

PRICES: Burr Clover, per pound, 19c; 10 pounds at 18c; 50 pounds and above at 17c.



Field of Crimson Clover

Crimson Clover

Crimson Clover has come to be one of the most important winter crops for the South, for grazing, cover crop and hay. It is one of the most valuable crops to put humus and nitrogen into the soil and to increase the productiveness. Can be grazed two or three months and then makes a crop. After grazing or cutting hay crop, the stubble turned under greatly enriches the soil. Can be sown in last working of summer crops. Rate of seeding about 20 pounds to the acre. Should be sown in August and September in upper part of cotton belt and September and October in lower part. Soil inoculation or artificial bacteria is necessary. (See page 13.)

Our seed are imported from Europe. They are guaranteed for purity above 98 per cent, and for germination above 95 per cent, under the South Carolina state seed laws.

PRICES: Crimson Clover, per pound, 26c; 10 pounds at 24c; 50 pounds and above at 22c. (These prices subject to change without notice.)

Biennial Yellow Sweet Clover

Sweet Clover comes from Northern Kentucky where for years it has grown wild as a weed, and was long looked upon as a pest. Discovery of the real value of this clover was made a few years ago, however, and this crop now forms one of the principal soil improvement and grazing crops. It is one of the hardiest of the legumes and thrives where none other will grow. On washed lands, in gullies, and on bare clay land, this crop will catch hold and grow. It is especially valuable to sow on waste lands that cannot be used for other crops and for lands that are considered worn out. Sweet clover builds up the soil, stops erosion and washing on sloping lands, and supplies the soil with humus.

There are three kinds of Sweet Clover, but the Biennial Yellow is considered best, as it makes a better quality hay crop than the White or Indian Clovers. The introducers of this clover describe it thus: "Biennial, yellow flowers. Grows erect, 2½ to 3 feet high the first year, and 4 to 5 feet high the second year, when it blooms and bears seed. Stems are nearly as fine as alfalfa, seldom being a quarter inch at the ground. Contains relatively large amount of leaves and fine branches."

PRICES: Biennial Yellow Sweet Clover, per pound, 25c; 10 pounds at 23c; 50 pounds at 21c.

As a hay crop Biennial Yellow Sweet Clover is used to some extent, but some animals will not eat it at first. The yellow is the most palatable variety, and is preferable to the white for grazing or hay.

Sweet Clover grows in all types of soils, and will make a better growth in acid soils than alfalfa and other clovers. The seed bed should be very compact and firm and not at all loose, for best results. Light loamy soil should not be planted to Sweet Clover. In the heaviest soils, the seed should be covered with a drag or toothed harrow to a depth of half an inch, and in course rough soil to the depth of an inch. A heavy roller should be used after the seed is put in. Seed may be planted in the South at any time of the year, but fall and spring planting will probably give best results. About ten pounds per acre is considered the best seeding, but where crop is to be plowed under, a heavier seeding may be used. Being a biennial plant, it stools out from the root crown in the spring of the second year and becomes much thicker than before.

The above information and recommendations are based on the experience of the Bokhara Seed Farms, the leading growers and experimenters with this crop. Our seed was obtained directly from them and is the best quality they offer. The seed is hulled, recleaned, scarified and guaranteed for purity and germination.



The Crop for Hogs

Russia and east Germany and owing to war conditions, however, in securing a limited quantity genuine Russian grown Winter Hairy Vetch which we will supply to our customers as long as our stocks last. Seed imported.

PRICES: Hairy Vetch, per pound, 24c; 10 pounds at 22c; 50 pounds and above at 20c. (These prices subject to change without notice.)

Dwarf Essex Rape

Rape is a winter grazing crop for cattle, hogs and sheep. Makes excellent winter greens for chickens. Sow any time from August to October, for early winter feeding. Can also be seeded in spring months. Should always be sown on rich soils such as would grow cabbage and rutabagas. Rate of seeding, broadcast, 6 to 8 pounds per acre; in drills 30" rows, 3 to 4 pounds per acre. Seed imported.

PRICES: Dwarf Essex Rape, per pound, 16c; 10 pounds at 14c; 50 pounds and above at 13c. (Prices subject to market fluctuations.)

Italian Rye Grass

A quick growing winter grass, especially valuable for winter lawns. Sow it over your Bermuda sod in the fall and it will furnish a beautiful green lawn while the Bermuda is dormant. Sow about forty pounds per acre. Seed imported.

PRICES: Italian Rye Grass, per pound, 12½c; 10 pounds at 11c; 50 pounds and above at 10c. (Prices subject to market fluctuations.)

Hairy Vetch

Hairy Vetch has long been one of the most popular winter crops in the South for hay and is especially valuable as a winter cover crop for soil improvement. Hairy Vetch adds nitrogen to the soil, preserves fertility and increases productivity of soil the following year. Planted with oats or other grain, it makes excellent hay crop. Seed of this crop is most largely produced in the following year. Very little seed has reached this country. We are fortunate, old customers come back year after year and pay us top prices for our latest and finest pedigreed strains of seed, because they have learned that such seeds yield them biggest profits from the crop. We have had to omit publication of catalogs for the past TWO seasons, because customers bought out our stocks before we could have catalogs printed. Seventy-five per cent of them were **old customers**, and most of the other twenty-five per cent were friends they had sent to us. **Join the thousands** of farmers who are making money growing crops from Coker's Pedigreed Seeds.

COST MORE—AND WORTH IT

You will readily understand that our pure bred, high yielding seeds cost more than ordinary seeds, and that is why we sell them for more. It costs us five thousand dollars a year to make them better, and your bushel of seed has to pay a few cents of that amount as its share. We have never attempted to compete in prices with other seedsmen—our single aim has been to breed better seeds that would make bigger yields and a better quality product. We know that our seeds are better and are worth more than ordinary seeds, because we prove it year after year by actual tests, and our customers know it equally as well. Our old customers come back year after year and pay us top prices for our latest and finest pedigreed strains of seed, because they have learned that such seeds yield them biggest profits from the crop. We have had to omit publication of catalogs for the past TWO seasons, because customers bought out our stocks before we could have catalogs printed. Seventy-five per cent of them were **old customers**, and most of the other twenty-five per cent were friends they had sent to us. **Join the thousands** of farmers who are making money growing crops from Coker's Pedigreed Seeds.

TO SUCCESSFULLY GROW: Alfalfa, Clovers, Cow Peas, Soy Beans, Vetches and other Legumes, to increase your yield, and to improve your soil use

Mulford Cultures

FOR LEGUMES

SCIENTIFICALLY PREPARED AND TESTED.

SMALL COST—LARGE RETURNS—EASY TO USE—NO LABOR EXPENSE

THE MULFORD NITRO-GERM consists of pure, tested cultures of active, vigorous nitrogen-fixing bacteria, for inoculating seeds of legumes or soil.

Legumes offer the best known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields.

The U. S. Department of Agriculture and many State Agricultural Experiment Stations recommend inoculation of legumes with nitrogen-fixing bacteria to induce a prompt "catch" and increase the yield.

THE MULFORD NITRO-GERM is prepared and tested by experts, in the biological laboratories of H. K. Mulford Co., Philadelphia, Pa., U. S. A., with the same degree of care as Mulford Antitoxins, Serums, Vaccines, etc., which are standard all over the world.

Be sure to always specify the particular legume for which THE MULFORD NITRO-GERM is desired, otherwise we will not know how to fill your order.

Prices—The Mulford Nitro-Germ is supplied for the varieties of legumes indicated, at the following prices: **Garden size** (about ¼ acre) **\$0.50; one acre size, \$1.50; five acre size, \$5.00.** (Not returnable.)



Coker's Special "Clipper" Seed Cleaner and Grader

¶ Removes all light, immature and worthless seed and all trash and foreign matter—by double screens and vertical air blast method. The most effective seed grader on the market. ¶ DOES EFFECTIVE WORK with all Southern seeds, including Wheat, Oats, Rye, Barley, Cotton, Corn, Peas, Sorghum, Soy Beans, Burr Clover, Kaffir Corn, Vetch, Milo Maize, Alfalfa, Millet, Rape, Crimson Clover, Onion Seed, etc. ¶ All "Coker's Special Clippers" are fitted with a special assortment of screens for Southern seeds, and furnished complete with **TWELVE SCREENS**.

These Machines Come in Two Sizes, No. 1-B and 2-B

The "Clipper"
Weighs Every Seed
and Kernel

No. 1-B

Hand Power Only

Price Complete with
Twelve Screens

\$29.75

**HAS NO EQUAL
SATISFACTION
GUARANTEED**



Well Made,
Nicely Finished,
Light Running

No. 2-B

Equipped for Hand
and Engine Power

Price Complete with
Twelve Screens

\$37.50

**MONEY
REFUNDED
AFTER THIRTY
DAYS TRIAL,
IF UN-
SATISFACTORY**

"COKER'S SPECIAL NO. 2-B CLIPPER"

¶ Oats graded on a No. 2-B Clipper, have averaged in accurate three year test on Pedigreed Seed Breeding and Experimental Farms, *17 Bushels to the Acre Increase*, against same seed not graded. Cotton seed properly graded on one of these machines will yield at least one bale more of cotton to the horse.

ONLY THE MATURE, PLUMP, HEAVY, FULL SIZE SEED FALL INTO THE SEED BOX, ALL OTHERS BEING REMOVED BY SCREENS AND FANS

¶ For further information, write for our special bulletin describing "Coker's Special Clipper" Cleaners.

Pedigreed Seed Company, Hartsville, S. C.

GENERAL SOUTHERN AGENTS

For Virginia, North and South Carolina, Georgia, Florida, Alabama, Mississippi and Louisiana

READ CAREFULLY BEFORE ORDERING

PRICES.

Our prices are for cash with order. If remittance is not sent with order, it means a delay until we can write you and receive the amount. Customers who have established their responsibility may have shipments made with sight draft attached to bill of lading.

We make no special prices or reductions. We believe our seeds are worth what we charge for them, to one customer the same as another. In case of general changes in price (owing to market fluctuations) orders received after the change will be filled at the new prices.

Remittance may be made by personal check, bank check, money order, cash or stamps. We are not responsible for your order until it reaches us.

SHIPMENTS.

Our excellent facilities enable us to fill practically every order the same day it is received. We exercise the same care with small orders as with large ones, but make a small additional proportional charge for the extra expense of handling, sacking, etc. This expense is included in the prices quoted.

On seed quoted Postpaid, we pay all delivery charges. But all prices marked not prepaid, and all bulk prices, including pecks, half-bushels, bushels and above, DO NOT INCLUDE transportation charges, and such shipments will be sent by express or freight collect, unless such charges are added to the prices quoted.

OUR GUARANTEE AND RESPONSIBILITY.

Attached to every bag of seed we ship is a card on which is printed the percentage germination and purity of that particular lot of seed. In no case do we ship seed that does not measure up to the highest standards.

Our PEDIGREED Seeds are bred by the plant-to-row method on our own breeding farms and we guarantee them true to name. Our IMPROVED Seeds are bred by general or mass selection and are also guaranteed true to name. Our GENERAL Seeds (those not otherwise classified as PEDIGREED or IMPROVED) are not bred by us, but otherwise are as good quality as can be obtained. On GENERAL Seeds, however, we give no warranty, express or implied, as to description, quality or productiveness.

EXAMINE OUR SEEDS when you receive them and test them in any way you see fit. If for any reason they are not satisfactory, they may be returned to us within ten days after they are received, in the original package, AT OUR EXPENSE, and WE WILL REFUND ENTIRE PURCHASE PRICE. We waive all responsibility for seeds which have been in a customer's hands more than ten days, as the vitality of any seed may be lessened or killed after leaving our warehouse, by subjection to moisture, heat, brine, chemicals, etc. Under no circumstances will we be responsible for the germination of seed after they are planted, whether within ten days or not, as there are many reasons for imperfect germination of planted seeds other than their vitality. In no case do we accept responsibility for more than the purchase price of seed. If purchaser does not accept seed under this condition, they are to be returned at once.

OUR GROWTH IS NO MYSTERY.

The large and increasing demand and wide popularity of Coker's Pedigreed Seeds is no mystery. Its explanation is simple to those who know our seeds, our methods and our men. Briefly, it is: We make no claims which our seeds do not prove; we give the best quality seeds that careful and expert breeding can produce; we exercise a personal care in handling our seeds at every point, recleaning and separating out all except the strong and vital; we sell only such seed as we can guarantee for high germination and purity, and give actual percentage figures of every lot; we stand absolutely behind every seed we sell with our fifteen years' reputation as breeders, with a substantial commercial backing and with a money-back guarantee; we give prompt and efficient service in our shipping department; and finally, we never allow any complaint, no matter what its nature, to go without a prompt investigation and, if well founded, a satisfactory settlement with the claimant. These are the methods and policies under which our work has grown from a small, one-man local enterprise, to one that now reaches every Southern state.

PEDIGREED SEED COMPANY

David R. Coker, President

HARTSVILLE, SOUTH CAROLINA

HOW TO HAVE SEED SHIPPED.

Shipments of twenty pounds and less to points within the second zone from Hartsville (within 150 miles, including all points in South Carolina and Central Southern part of North Carolina) are usually cheapest by parcel post. The amount of postage must always be added to the price quoted.

Small shipments to a distance are usually cheapest by express. If you are not sure about cheapest way to have shipment made, send us a sufficient amount to pay charges and we will send cheapest way and return to you any balance after paying charges.

Large shipments are always cheapest by freight. If your station is a prepay freight station, the amount of freight charges must be added to your remittance.

WHEN SEED ARRIVE.

Our seed are put up in substantial bags and boxes and delivered to the railroads in good order. When seed arrive in bad order, do not accept the shipment or pay the freight until your station agent makes a statement to that effect on your receipted freight bill. Send this freight bill to us and we will make claim and collect it from the railroad company for you.

You have ten days in which to examine and test our seeds in any way you may see fit. If they are not perfectly satisfactory in every way, return them to us in the original packages at our expense, and we will refund your money. However we will not refund money for seed that have been in a customer's hands for more than ten days, nor entertain any claim after that time.

